

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P211745

Luminaire Tested: **LSR4B20D010BZ EC4B10209040 4LBPSMW1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211745  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LSR4B20D010BZ EC4B10209040 4LBPSMW1  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH PLASTIC MATTE WHITE TRIM  
WATTAGE D010TR-21.86W DE010-20.46W D5LT-21.24W DMX-20.89W DL2-22.5W  
DL3-21.8 6W DLE-22.46W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1873.2 lumens  
Efficiency: N/A  
Efficacy: 90.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.34  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

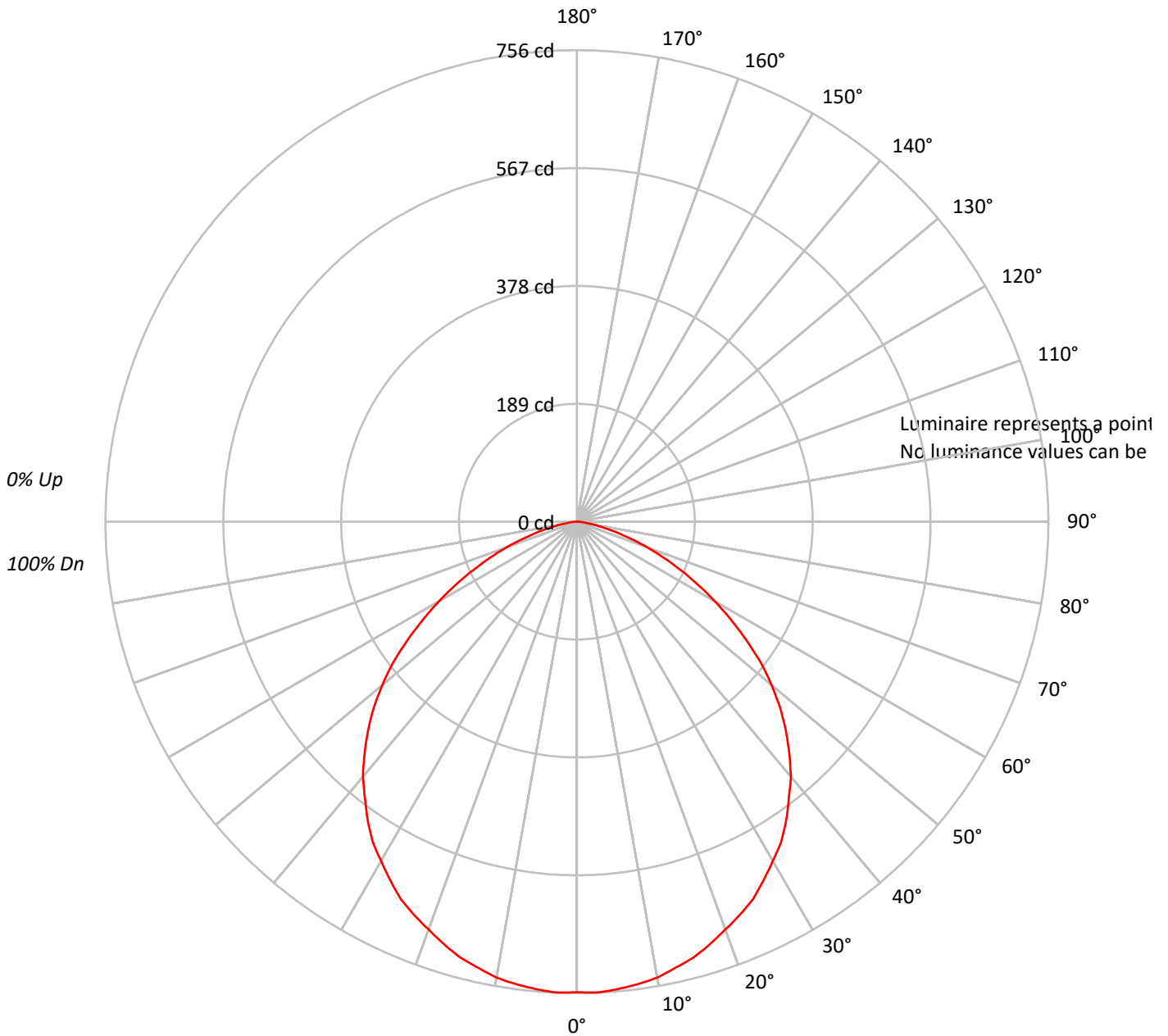
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86																			
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74																			
3	93	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63																			
4	85	74	66	59	83	72	65	59	70	63	58	68	62	57	66	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	47																			
6	73	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42																			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	43	39	37																			
8	63	50	41	36	61	49	41	36	48	41	35	46	40	35	45	39	35	33																			
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30																			
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27																			

**AVERAGE LUMINANCE (cd/sqm):**





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.5	3.8
10°-20°	203.8	10.9
20°-30°	307.0	16.4
30°-40°	365.3	19.5
40°-50°	364.6	19.5
50°-60°	296.5	15.8
60°-70°	182.4	9.7
70°-80°	70.7	3.8
80°-90°	11.3	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	582.3	31.1
0°-40°	947.6	50.6
0°-60°	1608.8	85.9
0°-90°	1873.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1873.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	755	
5°	752	72
15°	724	204
25°	668	307
35°	585	365
45°	474	365
55°	332	297
65°	183	182
75°	64	71
85°	9	11
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	754.7
2.5°	755.8
5°	752.5
7.5°	748.1
10°	742.5
12.5°	732.5
15°	723.6
17.5°	710.3
20°	695.9
22.5°	682.6
25°	668.1
27.5°	648.2
30°	628.2
32.5°	609.3
35°	584.9
37.5°	558.3
40°	533.9
42.5°	503.9
45°	473.9
47.5°	441.7
50°	407.3
52.5°	371.8
55°	331.9
57.5°	293.0
60°	255.3
62.5°	218.6
65°	183.1
67.5°	149.8
70°	118.8
72.5°	89.9
75°	64.4
77.5°	42.2
80°	25.5
82.5°	15.5
85°	8.9
87.5°	4.4
90°	0.0



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— 0°-180°







(END OF REPORT)